

Mr. David R. Consigli Chairman Town of Milford - Zoning Board of Appeals (ZBA) 52 Main Street Milford, MA

Re: The Residences at Stone Ridge - Phase II

Response to CEI Peer Review Comments

SMMA No. 19162

Dear Mr. Consigli:

On behalf of our client, The Gutierrez Company (the "Applicant"), SMMA has prepared the response below to the Review of Comprehensive Permit Application (40B) letter prepared by Comprehensive Environmental Incorporated (CEI), dated September 29, 2020. The original comments are included paraphrased in italics along with our responses in bold for clarity.

The Residences at Stone Ridge – Phase II (the "Project") is the next development phase of the Stone Ridge Master Plan that was previously approved by the Town of Milford and various State and Federal agencies. As with prior phases of development for the Restaurant Depot and first residential phase, the Applicant will obtain an Amended Order of Conditions (OoC) for the proposed Project. The Residences at Stone Ridge – Phase II proposed stormwater management system builds on the success of previously-approved plans including routing and Best Management Practices (BMPs).

The Applicant agrees to submit a Conformance Set of the drawings, technical report, and associated documentation upon satisfactory completion of the peer review process.

I. Compliance with Good Engineer Practice and Stormwater Management Standards

Standard 1: No New Treatment Stormwater Discharges

CEI states Standard 1 is met.

R. Concur - no response required.

Standard 2: Peak Rate Control

CEI stated it appears that proposed peak rates do not exceed existing peak rates, but has requested a drainage map with closer scale for review.

R. Concur. Refer to attached Existing and Proposed Drainage Areas exhibits plotted at Arch D 24x36 and 1"=150' scale.

Standard 3: Groundwater Recharge

CEI stated that the project (Residences – Phase II) provides 3,535 cubic feet of groundwater recharge in Basin 5B, while the calculated recharge for the project would be 9,465 cubic feet. CEI states that groundwater recharge for the Stone Ridge Master Plan is distributed between the four phases, including portions as part of Restaurant Depot, Residences at Stone Ridge – Phase I, and the future development.

R. Concur. The project is consistent with the Stone Ridge Master Plan stormwater management design, including a portion of the groundwater recharge requirement within this phase.

Standard 4: Water Quality

a. Water Quality Volume Calculations

CEI stated the water quality volume (WQV) calculation using the 1-inch rule (see LUHPPL description below) yields a WQV of 27,115 cubic feet. Further, the Contech pre-treatment devices account for 4.47 acres, which is 3.00 acres less than the total impervious area for the project.

b. TSS Removal

CEI stated the project site is located within a Zone B Surface Water Supply Protection Zone for a Class Water Source, as defined per 30 CMR 22.00. However, discharge points DP-1, DP-2, and DP-3 are within the Zone A protection area for the Charles River and Wildcat Pond. As such, any discharge to these points is designated as discharge to an Outstanding Resource Water (ORW). Further, proprietary separators may only be used as pre-treatment in an ORW. Lastly, infiltration or discharge of runoff from metal roofs is not permitted without pretreatment.

R. The drainage system is designed for non-rooftop impervious surface to be collected and routed through the Contech pre-treatment devices. Rooftop runoff, totaling 3.00 acres, is considered "clean" and will be routed directly to the BMPs. The proposed residential buildings roofs will not be metal and instead a thermoplastic polyolefin (TPO) membrane roofing system.

Applicant and SMMA concur with the ORW and Critical Area designation. Applicant agrees to revise the subsurface detention system to subsurface infiltration systems or similar BMP more suitable for discharge to an ORW.

Applicant agrees to perform exploratory test pits during detailed design to confirm depth to estimated high seasonal groundwater (EHSGW) and soil permeability. The stormwater management system will be adjusted, if required, for compliance with the Massachusetts Stormwater Handbook and Stormwater Standards.

Standard 5: Land Uses with Higher Potential Pollutant Loads (LUHPPL)

CEI stated that due to the vehicle trips per day the project should be designated as a LUHPPL with associated 1-inch rule when calculating Required Water Quality Volume and 44% TSS removal pretreatment requirement before discharge to infiltration structures.

R. Concur – the project will be designated as a LUHPPL moving forward. The Contech pre-treatment devices will be sized for the 1-inch rule and infiltration pretreatment exceeding 44%.

Standard 6: Critical Areas

CEI stated the project is located within a Critical Area and that discharges are treated via proprietary separators (Contech pre-treatment devices) before being stored in subsurface detention basins that eventually drain to surrounding wetlands. CEI further stated that MA Stormwater Handbook guidance prioritizes infiltration for the end-treatment of runoff into critical areas, in this case an ORW.

R. Applicant and SMMA concur with the ORW and Critical Area designation. Applicant agrees to revise the subsurface detention system to subsurface infiltration systems or similar BMP more suitable for discharge to an ORW.

Applicant agrees to perform exploratory test pits during detailed design to confirm depth to EHSGW and soil permeability. The stormwater management system will be adjusted, if required, for compliance with the Massachusetts Stormwater Handbook and Stormwater Standards.

Standard 7: Redevelopment

CEI stated Standard 7 is not applicable.

R. Concurs - no response required.

Standard 8: Construction Phase Erosion and Sediment Controls

CEI recommended adding temporary soil stockpiles and associated erosion control measures and stated soil stockpiles are prohibited within wetland resource buffer zones.

R. Location of temporary soil stockpiles is Means & Methods of the Contractor. Soil stockpile erosion controls will be dictated by the project SWPPP. An Erosion Control note, and callouts along the wetland resource buffer zones, specific to soil stockpiles and prohibited locations will be added to C-111: Site Preparation Plan.

Standard 9: Operation and Maintenance

CEI stated the submitted Operation and Maintenance (O&M) Plan meets Standard 9 and notes that a Stormwater Pollution Prevention Plan (SWPPP) will be required.

R. Concur – the project will require preparation of a SWPPP and coverage under the NPDES Construction General Permit (CGP).

Standard 10: Prohibition of Illicit Discharges

CEI stated the Applicant did not provide methods for detecting illicit discharges with a signed prohibition of illicit discharges state, nor did they list allowable dischargers, therefore Standard 10 is not met.

R. Concur – Applicant will submit an Illicit Discharges Statement with the conformed stormwater package.

II. Stormwater Management Design

1. Contech Pre-Treatment Device Sizing

CEI suggests that the contributing flow to the Contech pre-treatment devices is larger than the calculations account for. The total impervious cover in the sizing calculations is 3.00 acres less than the impervious cover in the HydroCAD model.

- R. The drainage system is designed for non-rooftop impervious surface to be collected and routed through the Contech pre-treatment devices. Rooftop runoff, totaling 3.00 acres, is considered "clean" and will be routed directly to the BMPs.
- 2. Subsurface Detention Systems

CEI stated the proposed subsurface detention systems discharge the 2-year storm and recommend the systems are converted to infiltration systems that detain higher storm events.

- R. The subsurface detention systems hydraulics function properly as currently designed. Applicant agrees to revise the subsurface detention system to subsurface infiltration systems or similar BMP more suitable for discharge to an ORW. If revisions to the proposed BMPs are made upon confirmation of EHSWG and soil characteristics, the recommended hydraulics will be considered.
- 3. Catch Basin Sub-Catchments

CEI questioned if there are an adequate number of catch basins based on contributing impervious area.

- R. Concur the stormwater collection system was designed using standard engineering practices. Additional structures may be added during detailed design if it is determined that additional structures are required.
- 4. Proposed Roadway Collection System

CEI questioned if runoff from the proposed roadway is collected and treated properly.

- R. A portion of the proposed roadway is collected in proposed subcatchment PR 3.2 and treated in the B-4 Constructed Wetland. The design of the B-4 Constructed Wetland included a contributing drainage area from future development.
- Infiltration Basin

CEI stated the proposed infiltrated basin will require a 10 ft excavation of existing soils and adequate test pit data is not provided to confirm required separate from the groundwater table.

R. The Subsurface Data Report describes the EHSGW in the cover letter and summarized in Table 1. Test pit investigations in the locations and topography similar to the locations of the proposed BMPs did not encounter groundwater or redoximorphic features (soil mottling) indicating evidence of EHSGW. Existing soil sampling indicates favorable permeability.

Applicant agrees to perform exploratory test pits during detailed design to confirm depth to estimated high seasonal groundwater (EHSGW) and soil permeability. The stormwater management system will be adjusted, if required, for compliance with the Massachusetts Stormwater Handbook and Stormwater Standards.

III. Civil Site Design

1. Test pits/EHSGW

CEI stated that the Subsurface Data Report from 2008 shows test pit locations that do not correspond directly to the project's proposed BMP locations and that estimated high seasonal groundwater (EHSGW) is not documented for all test pits.

- R. Refer to response II.5 above.
- 2. Snow storage

CEI stated the O&M prepared for the project mentions snow storage should occur away from resource area waters and recommends that snow storage areas should be designated on a site-wide BMP map that will be required for the SWPPP.

- R. Concur snow storage areas will be designated on a site-wide BMP map as required by the SWPPP.
- 3. Soil Stockpiles

CEI reiterated that soil stockpile locations were not indicated on the plans.

R. Location of temporary soil stockpiles is Means & Methods of the Contractor. Soil stockpile erosion controls will be dictated by the project SWPPP. An Erosion Control note, and callouts along the wetland resource buffer zones, specific to soil stockpiles and prohibited locations will be added to C-111: Site Preparation Plan.

IV. Construction Phase Pollution Controls

1. Soil Stockpiles

CEI reiterated that soil stockpile locations were not indicated on the plans and suggested soil stockpile erosion control measures.

R. Location of temporary soil stockpiles is Means & Methods of the Contractor. Soil stockpile erosion controls will be dictated by the project SWPPP. An Erosion Control note, and callouts along the wetland resource buffer zones, specific to soil stockpiles and prohibited locations will be added to C-111: Site Preparation Plan.

V. Related Environmental Permitting Required for the Project

1. Massachusetts Environmental Policy Act (MEPA)

CEI stated the Stone Ridge Master Plan received a Final Environmental Impact Report (FEIR) Certificate in 2008 and most recently the Residences at Stone Ridge – Phase I submitted a Notice of Project Change (NPC) in April 2019 and received a MEPA Certificate in May 2019 requiring no Supplemental EIR. CEI further state the applicant will be required to submit a NPC for the proposed project.

- R. Concur Applicant will be required to submit a Notice of Project Change (NPC) to MEPA for the proposed Residences at Stone Ridge Phase II project.
- 2. Wetland Protection Act (WPA)

CEI stated the proposed project includes permanent impacts to Isolated Land Subject to Flooding (ILSF) as defined under the Massachusetts Wetland Protection Act (WPA) and will therefore require WPA permitting under jurisdiction of the Milford Conservation Commission.

- R. Concur –Overall wetland impacts (temporary and permanent) were approved by the Army Corps of Engineers (ACOE) Section 404 Permit # NAE-2007-03200 which has jurisdiction of the wetlands on the Stone Ridge site. The ACOE reviewed the permanent impacts to the ILSF along with other nearby natural and historic/cultural resources. The impacts have been mitigated through wetland replication areas and through the Conservation Restriction on 29+/-acres of land on the site. The subject permanent impact will be included in the request for Amended Order of Conditions to the Town of Milford Conservation Commission.
- 3. National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP)

CEI stated a NPDES CGP is required from the US EPA for construction activities that disturb over one acre of land.

R. Concur – the project will require preparation of a SWPPP and coverage under the NPDES CGP prior to construction.

VI. Wetland Resource Areas

Isolated Land Subject to Flooding (ILSF)

CEI stated the proposed roadway will result in permanent impacts the Wetland 6 ILSF which is not included in the current Order of Conditions (OoC) dated 1/24/2019.

R. Concur – refer to response V.2 above.

Planting Plan

CEI recommends that two species proposed along the margins of Wetland 6 – bald cypress (Taxodium distichum) and swamp white oak (Quercus bicolor) – should be replaced with regionally native tree species with a facultative (FAC) indicator status.

R. Concur – the C-151: Planting Plan will be revised in the Conformance Set to replace these species with regionally native tree species with a facultative (FAC) indicator status.

VII. Traffic and Transportation Impacts

CEI stated their subcontractor, BSC Group (BSC), has provided a technical peer review of the traffic and transportation impacts associated with the proposed project, attached as an appendix.

R. Noted – Applicant's traffic consultant, The Engineering Company (TEC), has provided a response under separate cover.

We look forward to discussing this information with the Town of Milford Zoning Board of Appeals and their consultant, CEI. If you have any questions, please feel free to contact me at 617-520-9210 or wpark@smma.com.

Very truly yours,

SMMA

William Park, PE

Senior Associate | Civil Engineer

cc: Israel Lopez - The Gutierrez Company, (MF)

enclosures: Enlarged 24x36 Drainage Area Maps

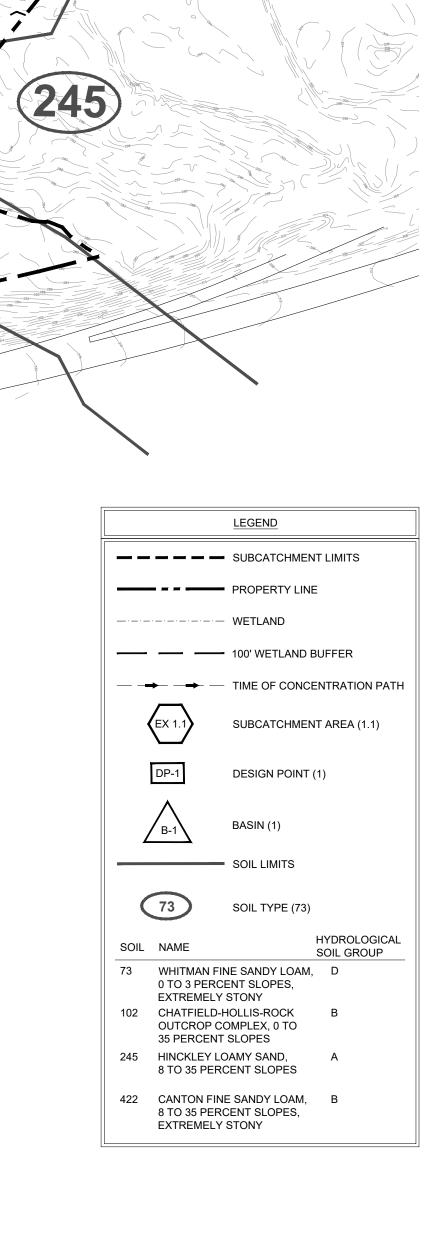
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(245)

EX 2.2

NTERSTATE 495

DP-3

(73)

DP-9024

= CLOUDED CHANGE					

DESCRIPTION:

MARK: DATE:

ISSUE LOG

JOB NO.	19162
PROJ. MRG.	JAF
PROJ.ARCH./ENGR.	JAH
CHECK BY	WWF
DRAWN BY	DCC
SCALE	1" = 150

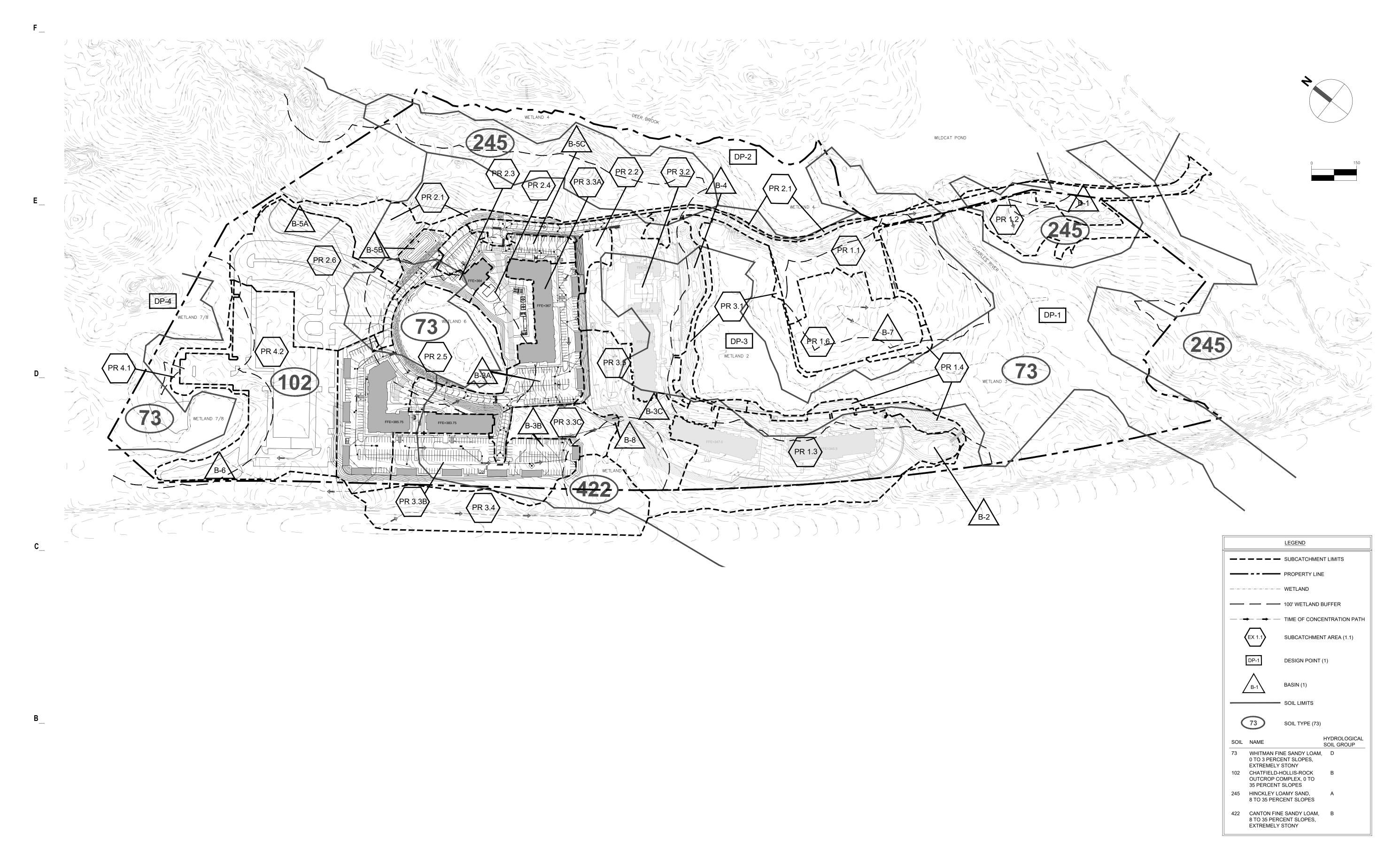
EXISTING DRAINAGE AREAS

FIG. 2.1



SYMMES MAINI & McKEE ASSOCIATES
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Cambridge, Massachusetts 02138
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MARK: DATE: DESCRIPTION:
ISSUE LOG

= CLOUDED CHANGE

JOB NO.	19162
PROJ. MRG.	JAH
PROJ.ARCH./ENGR.	JAI
CHECK BY	WWF
DRAWN BY	DCC
SCALE	1" = 150

PROPOSED DRAINAGE AREAS

FIG. 2.2